

1/1 - (C) WPI / DERWENT

AN - 2002-269525 [31]

AP - EP20010984565 20010117; WO2001US01384 20010117; [Based on WO0218412]
; AU20010029503 20010117

PR - US20010259516P 20010104; US20000228086P 20000828

TI - Seventeen nucleic acid molecules encoding human secreted proteins,
useful in the prevention, treatment and diagnosis of cancer, immune
disorders, cardiovascular disorders and neurological diseases

IW - SEVENTEEN NUCLEIC ACID MOLECULAR ENCODE HUMAN SECRETION PROTEIN USEFUL
PREVENT TREAT DIAGNOSE CANCER IMMUNE DISORDER CARDIOVASCULAR DISORDER
NEUROLOGICAL DISEASE

PA - (HUMA-N) HUMAN GENOME SCI INC

PN - EP1317472 A1 20030611 DW200346 C07H21/04 Eng 000pp

- WO0218412A1 20020307 DW200231 C07H21/04 Eng 501pp

- AU200129503 A 20020313 DW200249 C07H21/04 000pp

IC - C07H5/00 ; C07H21/02 ; C07H21/04 ; C07K14/00 ; C12N1/21 ; C12N15/63 ;
C12N15/85 ; C12N15/86 ; C12Q1/68

AB - WO200218412 NOVELTY - Seventeen nucleic acid molecules encoding human
secreted proteins, are new.

- DETAILED DESCRIPTION - Seventeen nucleic acid molecules encoding human
secreted proteins, are new.

- Each nucleic acid molecule (S1) comprises a sequence which is at least
95% identical to a sequence selected from:

- (a) a polynucleotide fragment of one of the 49 nucleotide sequences
(N1) defined in the specification, or a polynucleotide fragment of the
cDNA sequence (C1) included in one of the ATCC Deposit Nos. defined in
the specification, where C1 is hybridizable to a nucleotide sequence
selected from N1;

- (b) a polynucleotide encoding a polypeptide fragment, domain or
epitope of one of the 49 polypeptide sequences (P1) defined in the
specification, or a polypeptide fragment, domain or epitope encoded by
C1;

- (c) C1 or a polynucleotide encoding a polypeptide selected from P1;

- (d) a polynucleotide which is a variant, preferably allelic variant,
of a sequence selected from N1;

- (e) a polynucleotide which encodes a species homolog of a sequence
selected from P1; or

- (f) a polynucleotide capable of hybridizing under stringent conditions
to any of the polynucleotides of (a) to (e), where the polynucleotide
does not hybridize under stringent conditions to a nucleic acid having
a sequence of only A or T residues.

- INDEPENDENT CLAIMS are also included for the following:

- (1) a recombinant vector comprising S1;

- (2) a method of making a recombinant host cell comprising S1;

- (3) a recombinant host cell, comprising vector sequences, produced by
the method of (2);

- (4) an isolated polypeptide (P2), comprising an amino acid sequence at
least 95% identical to a sequence selected from:

- (a) a polypeptide fragment, domain or epitope of a sequence selected
from P1 or from the sequence encoded by C1, where the polypeptide
fragment may have biological activity;

- (b) a secreted form of a protein selected from P1 or from the sequence

encoded by C1;

- (c) a full length protein selected from P1 or from the sequence encoded by C1;
- (d) a variant, preferably allelic variant, of a sequence selected from P1; or
- (e) a species homologue of a sequence selected from P1;
- (5) an isolated antibody that specifically binds to P2;
- (6) a recombinant host cell that expresses P2;
- (7) a method of making a polypeptide, comprising culturing the recombinant host cell of (6);
- (8) the polypeptide produced by the method of (7);
- (9) a method of preventing, treating or ameliorating a medical condition, comprising administering P2 or S1;
- (10) a method of diagnosing a pathological condition or a susceptibility to a pathological condition, comprising:
 - (a) determining the presence or absence of a mutation in S1; and
 - (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of the mutation;
- (11) a method of diagnosing a pathological condition or a susceptibility to a pathological condition, comprising:
 - (a) determining the presence or amount of expression of P2 in a biological sample; and
 - (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide;
- (12) a method of identifying a binding partner to P2, comprising:
 - (a) contacting P2 with a binding partner; and
 - (b) determining whether the binding partner effects an activity of the polypeptide;
- (13) the gene corresponding to a cDNA sequence encoding a polypeptide selected from P1;
- (14) a method of identifying an activity in a biological assay, comprising:
 - (a) expressing a sequence selected from S1 in a cell;
 - (b) isolating the supernatant;
 - (c) detecting an activity in a biological assay; and
 - (d) identifying the protein in the supernatant having the activity; and
- (15) the product produced by the method of (14).
- ACTIVITY - Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic; cardiant.
- Chick chorioallantoic membrane (CAM) is a well-established system to examine angiogenesis. Blood vessel formation on CAM is easily visible and quantifiable. The ability of the polypeptides to stimulate angiogenesis in CAM can be examined.
- Fertilized eggs of the White Leghorn chick (*Gallus gallus*) and the Japanese quail (*Coturnix coturnix*) are incubated at 37.8 degrees Centigrade and 80% humidity. Differentiated CAM of 16-day-old chick and 13-day-old quail embryos is studied with the following methods. On Day 4 of development, a window is made into the egg shell of chick

eggs. The embryos are checked for normal development and the eggs sealed with cello tape. They are further incubated until Day 13.

Thermanox coverslips are cut into disks of about 5 mm in diameter. Sterile and salt-free growth factors are dissolved in distilled water and about 3.3 mg/5 ml are pipetted on the disks. After air-drying, the inverted disks are applied on CAM. After 3 days, the specimens are fixed in 3% glutaraldehyde and 2% formaldehyde and rinsed in 0.12 M sodium cacodylate buffer. They are photographed with a stereo microscope (Wild M8) and embedded for semi- and ultrathin sectioning as described above. Controls are performed with carrier disks alone.

- MECHANISM OF ACTION - Gene therapy.

- USE - The polynucleotides and polypeptides are useful for preventing, treating or ameliorating a medical condition (claimed) in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep.**
- The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities.**
- The polynucleotide are useful for chromosome identification. The nucleic acids, protein, antibodies, agonists and antagonists are useful in the diagnosis, treatment and prevention of:**
 - (a) cancer, particularly breast and ovarian cancer, and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital;**
 - (b) immune disorders such as Addison's disease, allergies, autoimmune hemolytic anemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis;**
 - (c) cardiovascular disorders such as myocardial ischemias;**
 - (d) wound healing;**
 - (e) neurological diseases such as cerebral anoxia and epilepsy; and**
 - (f) infectious diseases such as viral, bacterial, fungal and parasitic infections.**
- Numerous examples of each type of disorder are given in the specification.**
- (Dwg.0/0)**

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
 RN ***402537-39-7*** REGISTRY
 CN DNA (human clone HTPIY88 305-amino acid secretory protein cDNA plus flanks) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 47: PN: WO0218412 SEQID: 52 claimed DNA
 FS NUCLEIC ACID SEQUENCE
 SQL 1837
 NA 481 a 476 c 447 g 433 t

PATENT ANNOTATIONS (PNTE):

Sequence	Patent
Source	Reference
Not Given	WO2002018412
	claimed
	SEQID 52

SEQ 1 ggcacgagca gaaagcaacc tcagctgaaa caaatgcata attataattt
 51 gatttcagaa gtggaaacat gacccgaatt catgcaccta ctgattactc
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MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

10/539565

17 JUN 2005

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
 RN ***402537-11-5*** REGISTRY
 CN DNA (human clone HTPIY88 43-amino acid secretory peptide cDNA plus flanks)
 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 23: PN: WO0218412 SEQID: 24 claimed DNA

FS NUCLEIC ACID SEQUENCE

SQL 1872

NA 482 a 484 c 458 g 439 t 1 k 2 n 4 w 2 y

PATENT ANNOTATIONS (PNTE):

Sequence | Patent

Source | Reference

Not Given | WO2002018412

| claimed

| SEQID 24

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MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

(402537-39-7) DNA (human clone HTPIY88 305-amino acid secretory protein cDNA plus flanks)
Length = 1837 Score = 2698 Expect = 0.0

Score = 2698 Expect = 0.0
Identities = 1367/1369 (99%)
Strand = Plus / Plus
Query: 1 gggctcagggagggtctgtgcctccgttcagcagagctgcagctgctgcccagc
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(402537-11-5) DNA (human clone HTP1Y88 43-amino acid secretory peptide cDNA plus flanks)

Length = 1872 Score = 2670 Expect = 0.0

Score = 2670 Expect = 0.0
Identities = 1360/1369 (99%)
Strand = Plus / Plus
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/ Query: 716 aggactcatctcaaaggcaaaaatcaaggctatcaagtatacgatcatcatcatcatt
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1126
- Query: 771 cttgccttcatctgctgtggagtcacatacttcctgttgcacatttgacaatt
825 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1181
Query: 826 tcaaccccttcagacacccaggagcgttctatgcctctgtgatcattcagaa
880 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1236
Query: 881 cctgccaggcattgaatagtgccatcaacccctcatctactgtgtcttcagcagc
935 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Subject: 1237 cctgccaggcattgaatagtgccatcaacccctcatctactgtgtcttcagcagc
1291
Query: 936 tccatctcttccccctgcagggagcaaagatcacaggattccagaatgacgttcc
990 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1346
Query: 991 gggagagaactgagaggcatgagatgcagattctgtccaagccagaattcatcta
1045 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Subject: 1347 gggagagaactgagaggcatgagatgcagattctgtccaagccagaattcatcta
1401
Query: 1046 gacccttagggcagtgccagtgtctaggctgagcaccatcagctctccaggtcct
1100 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Subject: 1402 gacccttagggcagtgccagtgtctaggctgagcaccatcagctctccaggtcct
1456
Query: 1101 gtcacctgttggcacgtgcatgaaacccgagccaaacctcaccccacccctgtc
1155 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1511
Query: 1156 attacctggagatgcacaagacaaatgttctaattgactgcatgcactgttaag
1210 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1566
Query: 1211 tattggccaacacgaactccccagttattcatgccagccaggaaggaaacgcctt
1265 ||||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1621

Query: 1266 cttccccaccattcccagccctccttcccactggccagcacctgaacccagtga
1320 |||||||

Subject: 1622 cttccccaccattcccagccctccttcccactggccagcacctgaacccagtga
1676 |||||||

Query: 1321 acacaggcattagtggtcagggtcctggcttggagccagtgagtagac 1369
|||||||

Subject: 1677 acacaggcatcagtggtcagggtcctggcttggagccagtgagtagac 1725
|||||||